UNITED STATES PATENT AND TRADEMARK OFFICE

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EXAMINER
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3623	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

Office Action Summary	Application No. 09/474,974	Applicant(s) SAMRA ET AL.
	Examiner Beth Van Doren	Art Unit 3623

-- The MAILING DATE f this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>05 March 2003</u> .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-4,6-16 and 18-23</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-4,6-16 and 18-23</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4)☐ Interview Summary (PTO-413) Paper No(s). _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: .

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.　　A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 03/05/03 has been entered.

2.　　The following is a non-final office action in response to the request for continued

examination received on 03/05/03. Claims 5 and 17 have been cancelled. Claims 22 and 23

have been added. Claims 1, 8-11, and 13 have been amended. Claims 1-4, 6-16, and 18-23 are

now pending in this application.

Response to Amendment

3.　　Applicant's amendments to claims 8, 9, 10, and 13 are sufficient to overcome the claim

objections set forth in the previous office action.

Claim Rejections - 35 USC § 102

4.　　The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6-16, and 18-23 are rejected under 35 U.S.C. 102(b) as being anticipated by

Jackson et al. (*Strategic Database Marketing*).

5.   As per claim 1, Jackson et al. discloses a method for increasing the efficiency of

marketing campaigns using a targeting engine for analyzing data input and generating data

output, said method including the steps of:

using historical data to determine a target group based upon a plurality of models

embedded within and executed by the targeting engine, the targeting engine is configured to

determine a sequential order for combining the models to define the target group, and combine

the models in the determined sequential order to define the target group and determine a risk

factor for the target group (See page 173, section 1, page 174, sections 1 and 2, page 175, table

11-1, page 176, all, page 177, sections 1-4, page 179, sections 1 and 2, page 180, section 1, page

181, sections 1 and 2, page 182, all, page 183, section 1, page 184, section 1, and page 185,

sections 1, wherein a database is maintained with past data about customers (buying patterns,

past purchases, time of purchases, etc.). Multiple models are built to predict customer behavior.

For example, two models would be built, one representing a customer's likelihood to respond to

an offer, the second representing the customer's risk factor. The plural models are combined by

the targeting engine (i.e. the computer application with databases and statistical tools that

manipulates the data of the database by inserting each customer's data into the variables of the

plural models and solves each model in a specific order to determine a score for each customer

(two sequential orderings occur: the variables within these models are weighted and ordered in a

specific sequence and the a primary model is applied first and then the secondary model). This

end result of the targeting engine's combining is both (1) the generation of a ranked list of the

customers which is broken into target groupings and (2) a risk factor (or aspect) being calculated

and considered for each target grouping through the execution of the second model); and

directing the marketing campaign towards the target group determined by the models

(See page 174, section 2, page 176, all, and page 177, section 1, wherein the marketing campaign

is directed towards the target group determined using the models).

6.   As per claim 2, Jackson et al. further discloses a method wherein said step of using

historical data to determine a target group based upon a plurality of models further comprises the

step of combining models to determine a depth of a targeted mailing (See pages 162, page 174,

section 2, page 176, all, and page 177, section 1. Segmentation is revealed as a way to

manipulate the records in the database to produce relevant groups to target. On page 165, the 60-

20 rule is revealed, explaining how about 20 percent of the records in the seemingly large

database account for 80 percent of a company's business. Again, a method of market analysis

using appropriate segmentation and modeling determines the appropriate depth of the database to

target market. See page 174, section 2, page 176, all, and page 177, section 1, wherein modeling

reveals to the marketer which segments to choose (the depth) based on the modeling. See also

pages 184-185, which disclose the use of multiple models to properly fit marketing needs and

properly predict customer behavior).

7.   As per claim 3, Jackson et al. teaches a method wherein said step of using historical data

to determine a target group based upon a plurality of models further comprises the step of

combining models to determine the likelihood of a customer response (See pages 40-41 in which

Jackson et al. discusses using an RFM, or recency, frequency, and monetary, analysis that

identifies the "best customers" with the best buying potential and also performing a comparison

analysis on these prediction models to locate the segments of customers in the database with the

best buying potential. See also page 174 in which Jackson et al. discusses scoring models that

predict how individuals will behave in the future and their likelihood of response or purchase.
See also pages 184-185, which disclose the use multiple models to properly fit marketing needs
and properly predict customer behavior).

8.   As per claim 4, Jackson et al. further discloses a method wherein said step of using
historical data to determine a target group based upon a plurality of models further comprises the
step of combining models to generate a potential customer list (See again pages 40-43 which
discusses creating a marketing list by identifying the best current customers as well as
identifying new customers to market products to. See page 174, section 2, page 176, all, and
page 177, section 1, wherein the customers are rated and placed in an ordered list, and then
potential customers are taken from this list. See also pages 184-185, which disclose the use of
multiple models to properly fit marketing needs and properly predict customer behavior).

9.   As per claim 6, Jackson et al. discloses a method wherein said step of using historical
data to determine a target group based upon a plurality of models further comprises the step of
combining models to determine expected profitability per customer of a marketing campaign
(See pages 174-177 in which Jackson et al. discusses using scoring models to determine the
profitability of each customer and then segmenting the customer database based on this
information as well as the customer's likelihood of response. Each segment is evaluated as to its
profitability. See also pages 184-185, which disclose the use of multiple models to properly fit
marketing needs and properly predict customer behavior).

10.   As per claim 7, Jackson et al. teaches a method wherein said step of using historical data
to determine a target group based upon a plurality of models further comprises the step of
combining models to determine the expected profitability per product of a marketing campaign

(See page 158-163, specifically page 163, which discusses modeling individual customers to conduct product segmentation which identifies target audiences that have the highest probability of purchasing the identified product, thus creating the most revenue. See page 180, section 1, and page 181, all, wherein the scoring models represent the expected profitability of a product. See also pages 184-185, which disclose the use of multiple models to properly fit marketing needs and properly predict customer behavior).

11.   As per claim 8, Jackson et al. discloses a method wherein said step of directing the marketing campaign towards the target group determined by the models further comprises the step of rank ordering accounts (See pages 173-177 in which modeling to predict future behavior of customers is disclosed. Specifically see page 174, which discusses using these models to rank every individual in the database based on his/her respective accounts and future buying potential).

12.   As per claim 9, Jackson et al. further discusses a method wherein said step of directing the marketing campaign toward the target group determined by the models further comprises the step of segmenting accounts based on customer demographics (See pages 158-163, specifically page 163, which discusses modeling individual customers to conduct demographic segmentation which ranks and sorts customers or ranks and sorts products and services based on attributes such as age, occupation, and marital status. See also page 177, section 4).

13.   As per claim 10, Jackson et al. further teaches a method wherein said step of directing the marketing campaign toward the target group determined by the models further comprises the step of identifying cross-sell targets (See page 44 in which Jackson et al. discusses matching the modeled predictive profiles of the customers in the database with the profiles of either products

or other customers to locate cross-sell opportunities. See also pages 86-87, which again

discusses identifying cross-sell targets based on profile information stored in the marketing

database.).

14.   As per claim 11, Jackson et al. discloses a system configured to increase the efficiency of

marketing campaigns, said system comprising:

         a customer database which includes customer demographics and historical data (See

pages 27-30 wherein Jackson et al. discuss the demographic and historical data contained in the

customer database. See also page 173, section 1, page 177, section 4, page 179, section 1, page

181, section 2, 182, all, and 183, section 1);

         a targeting engine for analyzing data input and generating data output, said targeting

engine having a plurality of models stored thereon, said targeting engine configured to access

said historical data, determine a sequential order for combining the models to define the target

group, and combine said models in the determined sequential order to determine a target group

for marketing and determine a risk factor for the target group (See page 173, section 1, page 174,

sections 1 and 2, page 175, table 11-1, page 176, all, page 177, sections 1-4, page 179, sections 1

and 2, page 180, section 1, page 181, sections 1 and 2, page 182, all, page 183, section 1, page

184, section 1, and page 185, sections 1, wherein a database is maintained with past data about

customers (buying patterns, past purchases, time of purchases, etc.). Multiple models are built to

predict customer behavior. For example, two models would be built, one representing a

customer's likelihood to respond to an offer, the second representing the customer's risk factor.

The plural models are combined by the targeting engine (i.e. the computer application with

databases and statistical tools that manipulates the data of the database by inserting each

customer's data into the variables of the plural models and solves each model in a specific order

to determine a score for each customer (two sequential orderings occur: the variables within

these models are weighted and ordered in a specific sequence and the a primary model is applied

first and then the secondary model). This end result of the targeting engine's combining is both

(1) the generation of a ranked list of the customers which is broken into target groupings and (2)

a risk factor (or aspect) being calculated and considered for each target grouping through the

execution of the second model); and

a graphical user interface for accessing a customer database and displaying data output

(See pages 119-122 in which Jackson et al. discuss database processing systems, specifically

database management systems, that create, modify, and control access to the information stored

in the database. As shown in figure 8-3, reports are generated through the system. See also

pages 130-135 which discusses system data structures and platforms employable for system

implementation. Specifically, pages 133-134 disclose the use of server technology, including

PCs with LAN access to a central storage unit. As it is well known in the area of server

technology, these PCs would be equipped with GUIs. See also pages 156-157, which further

discuss system data structures and platforms that include tools for counting, profiling, reporting,

research, and other business planning using the data stored in the database).

15.   As per claim 13, Jackson et al. discloses a system further configured to use historical data

in said customer database to direct a marketing campaign towards a target group determined by

the plurality of models (See again page 39, wherein Jackson et al. discusses directing database-

driven marketing campaigns at the right customers. See also pages 158-165 which discusses

segmenting the customer database into subsets based on specific characteristics, these specific

characteristics causing certain subgroups to be identified as more inclined to respond to a

particular targeted marketing campaign. See also page 174, section 2, page 176, all, and page

177, section 1, wherein the marketing campaign is directed towards the target group determined

using the models).

16.   As per claims 14-16 and 18-21, claims 14-16 and 18-21 are system versions of claims 2-4

and 6-9, respectively. Since the specification provides nothing more than a method implemented

in a network environment, claims 14-16 and 18-21 are rejected on the same grounds as the

method of claims 2-4 and 6-9, respectively.

17.   As per claim 22, Jackson et al. teaches a method wherein the step of using historical data

to determine a target group further comprises the step of using historical data to determine a

target group based upon a plurality of models embedded within and executed by the targeting

engine wherein the targeting engine is further configured to determine a risk factor for the target

group after combining each model (See page 184, section 1, and page 185, section 1, wherein the

targeting engine determines the risk factor for the target group after each of the models is

combined (the targeting engine computes the scores for the multiple scoring models by

combining each of the multiple models in a specific order, such as the propensity to buy model is

combined before the risk model. The risk factor is determined by combining the model for risk,

combining the risk model in sequential order with the other models, and placing the customers in

a ranked order and considering the weight of risk). For example, group 10 out of 10 groups will

have the lowest risk factor, making them the least marketable decile).

18.   As per claim 23, Jackson et al. teaches a system wherein said targeting engine is further

configured to determine a risk factor for the target group after combining each model (See page

184, section 1, and page 185, section 1, wherein the targeting engine determines the risk factor

for the target group after each of the models is combined (the targeting engine computes the

scores for the multiple scoring models by combining each of the multiple models in a specific

order, such as the propensity to buy model is combined before the risk model. The risk factor is

determined by combining the model for risk, combining the risk model in sequential order with

the other models, and placing the customers in a ranked order and considering the weight of

risk). For example, group 10 out of 10 groups will have the lowest risk factor, making them the

least marketable decile).

Response to Arguments

19.   Applicant's arguments with regard to Jackson et al. (*Strategic Database Marketing*) have

been fully considered but they are not persuasive. In the remarks, the Applicant argues that

Jackson et al. does not teach or suggest (1) using historical data to determine a target group based

on a plurality of models embedded within and executed by a targeting engine wherein the

targeting engine is configured to determine a sequential order for combining models to define the

target group, and combining the models in the determined sequential order to define the target

group and determine a risk factor for the target group, and directing the marketing campaign

towards the target group determined by the models or (2) using a targeting engine to analyze data

input or generating data output.

In response to the Applicant's arguments, Examiner respectfully disagrees and asserts

that Jackson et al. does teach these aspects. To reiterate the art rejection set forth above, a

database is maintained with historical and other data about customers (buying patterns, past

purchases, time of purchases, demographics, etc.). Multiple models are built to predict customer

behavior (see page 184, section 1). For example, two models would be built, one representing a

customer's likelihood to respond to an offer, the second representing the customer's risk factor.

The plural models are combined by the targeting engine. Examiner points out that a "targeting

engine" as recited in the claims is merely a tool used for performing targeting and therefore the

computer application with databases and statistical tools of Jackson et al. is proper as a targeting

engine. The targeting engine (i.e computer application) manipulates the data of the database by

inserting each customer's data into the variables of the plural models (i.e. embeds) and solving

each of the plural models (i.e. executing) in a specific order to determine a score for each

customer (See page 180, section 1, page 181, sections 1 and 2, page 182, all, 184, section 1,

wherein two sequential orderings occur: the variables within these models are weighted and

ordered in a specific sequence and the a primary model is applied first and then the secondary

model). The targeting engine performs the combination (i.e joining of the plural models together

with the data to produce a score for each customer) which results in both (1) the generation of a

ranked list of the customers which is broken into target groupings and (2) a risk factor (or aspect)

being calculated and considered for each target grouping through the execution of the second

model.

Therefore, Examiner asserts that through the process above, the targeting engine does

analyze data input (customer data) to generate data output (scores for each customer as

determined by the models). Since the process of Jackson et al. uses computer applications and

statistical analysis to identify the best customer segments for marketing purposes, Examiner

asserts that Jackson et al. does teach increasing the efficiency of marketing campaigns.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kurtzman, II et al. (U.S. 6,144,944) teaches a system that uses engines to determine which advertisement to target based on known information such as demographic information.

Mitchell et al. ("The role of demographics in segmenting and targeting consumer markets: A Delphi study") discusses current trends in segmentation and the targeting of consumer markets.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beth Van Doren whose telephone number is (703) 305-3882. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

bvd
May 1, 2003

Susanna Diaz
Patent Examiner
Art Unit 3623